

## **Draft Compatibility Determination**

**Use:** Opening of Bain's Gap Road to the Public

**Refuge Name:** Mountain Longleaf National Wildlife Refuge

**County:** Calhoun, Alabama

### **Establishing and Acquisition Authorities:**

The Bob Stump National Defense Authorization Act for Fiscal Year 2003, P.L. No. 107-314  
Additional acquisition authority: Fish and Wildlife Act 1956

### **Refuge Purposes:**

Establishment purpose: "(1) The Secretary of the Interior shall establish on the real property transferred under subsection (a) the Mountain Longleaf National Wildlife Refuge to enhance, manage, and protect the unique mountain longleaf pine ecosystem on the property. (2) The Secretary of Interior shall manage the Mountain Longleaf National Wildlife Refuge in a manner that— (A) conserves and enhances populations of fish, wildlife, and plants in the Refuge, including migratory birds and species that are threatened or endangered, with particular emphasis on the protection of the mountain longleaf pine plant ecosystem; (B) protects and enhances the quality of aquatic habitat in the Refuge; (C) provides, in coordination with the Alabama Department of Conservation and Natural Resources, the public with recreational opportunities, including hunting, fishing, wildlife observation, and photography; (D) provides opportunities for scientific research and education on land use and environmental law; and (E) is consistent with environmental restoration efforts conducted by the Secretary of the Army on the Refuge or on lands adjacent to the Refuge." 116 Stat 2710, dated Dec. 2, 2002. (The Bob Stump National Defense Authorization Act for Fiscal Year 2003, P.L. No. 107-314)

Additional purposes: "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. § 742f(a)(4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. § 742f(b)(1) (Fish and Wildlife Act of 1956)

### **National Wildlife Refuge System Mission:**

"The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

## **Description of Use:**

### What is the use? Is the use a priority public use?

This compatibility determination evaluates the potential to open Bain's Gap Road for traffic to access the refuge from both the east and the west during daylight hours. The use of the road by through traffic is an expected result of this action. It is estimated that the increase in use of the road by refuge visitors will be approximately 100 vehicles per day in addition to the 50 vehicles per day accessing those portions of the refuge, currently open to the public, through the east gate. Through traffic volume is unknown but is estimated in the range of 750 - 2,000 vehicles per day.

Bain's Gap Road is a two-lane, paved road that was closed by the U.S. Army in 1999 prior to refuge establishment. The road bisects the refuge running east-west (Fig. 1). The eastern portion of Bain's Gap Road was opened to allow daytime access to the public use areas of the refuge in December 2004 (Public Use Plan February 2004). The remainder of the road is closed and crosses an area that is contaminated or potentially contaminated with unexploded ordnance (UXO). Areas of the refuge adjacent to the closed portion of Bain's Gap Road are currently closed to the public.

The Federal Highway Administration (FHWA) has estimated a need for a minimum of \$325,000 of road improvements for public safety prior to opening the road. Additional funding will be necessary for the installation of a timed gate and associated electricity to meet our agreed upon land use control (daylight access only) with the Army and to maintain the security of the refuge. The cost of the gate and associated electricity is estimated at \$200,000. UXO clearance will need to occur prior to initiation of the road improvements and prior to installation of electricity for the timed gate. The U.S. Army has estimated the cost of UXO clean up necessary for road improvements to be approximately \$280,000.

### Where would the use be conducted?

Bain's Gap Road bisects the refuge from east to west (Figure 1) about midway, north and south, of the refuge boundary. Bain's Gap Road traverses a variety of habitats from heavily impacted former Army ranges denuded of vegetation to relatively pristine forest and wetland habitats. Forest habitats vary from pine to hardwoods with a portion of the road directly adjacent to an old growth longleaf pine stand. Bain's Gap Road crosses two streams (one stream twice) and borders a stream for approximately 0.50 miles.

Access to public use areas of the refuge is available only off of Bain's Gap Road. Public use roads diverge from Bain's Gap Road at the top of the gap. Due to the road features, public access to and from Bain's Gap road occurs at points with limited site distance for oncoming traffic on Bain's Gap Road.

# MOUNTAIN LONGLEAF NATIONAL WILDLIFE REFUGE

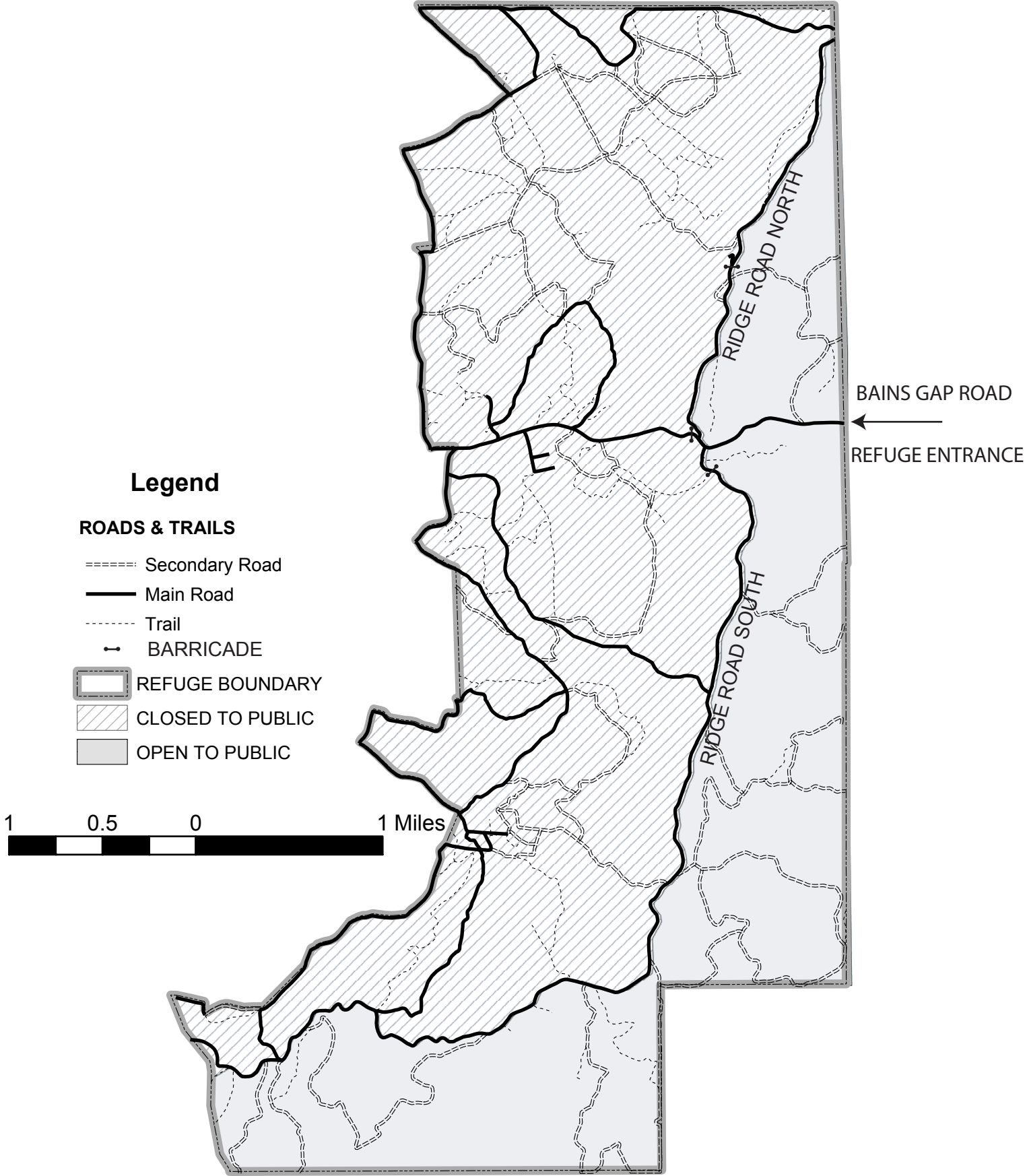


FIG. 1 PUBLIC ACCESS AREAS

When would the use be conducted?

Bain's Gap Road is proposed to be open to the public during daylight hours every day of the year. Closure of the road will occur to accommodate UXO clearance by the U.S. Army on adjacent areas of the refuge and to facilitate refuge management activities as necessary.

How would the use be conducted?

In early 2004, the U.S. Fish and Wildlife Service asked the FHWA to study the impacts of opening Bain's Gap Road, from both the east and the west, on safety of refuge visitors and the commuting public. This study recommended implementation of several safety measures including widening Bain's Gap Road from a 20-foot wide paved surface to 22-foot wide paved surface to accommodate the anticipated 2,000 vehicle per day of additional traffic. In addition, a 6-foot wide shoulder was recommended for each side of the traveled way and an additional clear area of 6 to 8-feet is also recommended.

Due to the high quality forest and other habitats that would need to be removed to meet FHWA standards along the roadway, the refuge will need to obtain waivers/exceptions as necessary from FHWA in order to protect these habitats. The refuge anticipates requesting waivers/exceptions for areas of moderate to high habitat value in order to protect the biological integrity of the refuge. This may result in the additional use of guardrails or other safety and traffic control devices, as appropriate, to provide a comparable level of public safety with fewer or no impacts to habitats. In areas with low habitat value (e.g. along former U.S. Army ranges) the refuge anticipates meeting these FHWA standards as determined to be necessary by consulting engineers.

Opening of Bain's Gap Road will necessitate additional law enforcement patrols to control primarily speeding and trespass, but also littering and other refuge violations. The refuge currently has no law enforcement on site. An agreement will be needed with local law enforcement agencies for patrols on the refuge or, alternatively, a commitment for additional Service law enforcement activity on the refuge.

Increases in wildlife disturbance and mortality from vehicular traffic are expected. Enforcement of the 25 mph speed limit through the refuge would minimize wildlife mortality to a level that should not affect the biological integrity of the refuge.

Increases in maintenance costs for Bain's Gap Road are expected. Current refuge funding is not sufficient to maintain existing roads/firebreaks nor is there currently a maintenance person/staff for the refuge. A cooperative agreement would need to be completed with Calhoun County for maintenance of Bain's Gap Road. To reduce the chance of the spread of invasive species (kudzu) from adjacent areas of Bain's Gap Road to the refuge through maintenance activities, any agreement with Calhoun County would need to detail special conditions for mowing and/or movement of dirt along Bain's Gap Road.

Increased coordination, between City of Anniston, Joint Powers Authority, U.S. Army, Mountain Longleaf NWR and Calhoun County, for closure of the road in support of UXO clean up will be needed if Bain's Gap Road is opened to the public. UXO clean up is anticipated in the near future within and adjacent to the refuge. During UXO recovery operations, an exclusion zone will be established for safety in the event an item being recovered detonates. The size of the exclusion will vary depending on the anticipated maximum size the UXO used in the area. UXO clean up along the section of Bain's Gap Road belonging to the Joint Powers Authority is in progress. Coordination will be needed to notify the public of the impending closure(s) and to actually close the road.

Why is this use being proposed?

The refuge intended to open Bain's Gap Road and allow access from both the east and the west once UXO clean up was complete and all of the refuge could be opened to the public. The timing of this proposed opening, prior to UXO clean up being completed and the remainder of the refuge opened to the public, is a result of increased interest in opening the road by the public and elected officials. Elected officials have cited economic, public safety (evacuation route), and convenience as reasons for opening the road at this time. The areas of the refuge that are presently closed to the public would not change as a result of the opening of the road. Vehicles would be prohibited from stopping within these closed areas of the refuge.

**Availability of Resources:**

Resources involved in the administration and management of the use:

The Refuge does not at the present time have sufficient resources to complete required road improvements. Calhoun County officials have offered to provide funding of approximately \$400,000 to do needed improvements and install a timed gate on the Refuge portion of Bain's Gap Road. The U.S. Army has indicated that funding is likely to be available for UXO clean up as needed to perform road improvements. Once road improvements have been made and the road is opened to the public, there will be added costs to the refuge for coordination, maintenance, and law enforcement for which the refuge currently does not have resources to meet. Cooperative arrangements will be sought with the City of Anniston, Calhoun County and others to meet these needs.

Special equipment, facilities, or improvements necessary to support the use:

Prior to opening Bain's Gap Road

Survey and Design - \$100,000

Road Improvements - \$325,000

Timed Gate w/ electric - Appr. \$100,000 - \$200,000

UXO clean up (Army funded and/or coordinated) - \$270,000 - \$400,000

Maintenance costs:

Once Opened (annual costs) -

Law Enforcement - \$10,000/yr (less if local law enforcement agencies will cooperatively patrol)

Maintenance (mowing, road repairs, etc.) - \$15,000/yr (less if cooperative arrangement made with Calhoun County)

Monitoring costs:

Installation of traffic counters with speed recording capabilities will be necessary for refuge management oversight purposes. One time cost of \$5,000 and annual maintenance cost of \$500.

Offsetting revenues: None

**Anticipated Impacts of the Use:**

Short-term impacts:

Refuge Closure

During the period of construction on Bain's Gap Road it is likely that intermittent or brief extended closures of the Refuge to the public will be necessary.

Disturbance to Wildlife

The operation of heavy equipment during construction periods along Bain's Gap will likely lead to localized disturbance of wildlife for the duration of the construction.

Disturbance to Habitats

Impacts to refuge habitats will be both short term and long term. Short term impacts will result from the temporary disturbance or destruction of areas outside the permanent footprint of road construction. Provided these areas do not develop problems with invasive species due to this disturbance, these impacts would only be short term following restoration and/or revegetation of disturbed areas.

Long-term impacts:

Direct Long Term Impacts

Refuge visitor safety

Access to public use areas of the refuge is only available off of Bain's Gap Road. These public use roads diverge from Bain's Gap Road at the top of the ridge. Due to the current design of the road, public access to and from Bain's Gap road occurs at points with limited site distance. Road improvements and traffic control devices such as stop signs should mitigate this risk.

### Refuge Habitats

Bain's Gap Road bisects the refuge from east to west (Figure 1) about midway, north and south, of the refuge boundaries. Bain's Gap Road traverses a variety of habitats from heavily impacted former U.S. Army ranges denuded of vegetation to relatively pristine forested habitats. Forest habitats vary from pine to hardwoods with a portion of the road directly adjacent to an old growth longleaf pine stand. Bain's Gap Road crosses two streams (one stream twice) and borders a stream for approximately 0.50 miles. Direct impacts will occur to 5 acres of refuge habitat if FHWA recommendations are met on one mile of Bain's Gap Road and waivers/exceptions are granted to the Refuge from FHWA recommendations on remaining areas.

Impacts are also expected from additional fragmentation of habitats as a result of the increased width of the road. The degree of impact is not directly a measurement of loss of habitat but is rather a cumulative affect that widening the roadway and associated infrastructure will have on species that are sensitive to habitat patch size and/or disturbance.

### Refuge Wildlife

Increases in wildlife disturbance and mortality from vehicular traffic can be expected.

### Indirect Long Term Impacts

Diversion of future refuge law enforcement and/or maintenance personnel and funding to support the use of Bain's Gap Road by primarily non-refuge visitors

Cumulative: None

### **Public Review and Comment:**

The period of public review and comment began and ended .

The following methods were used to solicit public review and comment:

Why was this level of public review and comment selected?

Summarize comments received and any actions taken or not taken because of comments received.

**Determination:**

Opening of Bain's Gap Road

Determination is Pending

**Stipulations Necessary to Ensure Compatibility:**

Hours of Use

Daylight hours only.

Law Enforcement

Opening of Bain's Gap Road will necessitate additional law enforcement patrols to control primarily speeding and trespass, but also littering and other refuge violations. The refuge currently has no law enforcement personnel on site. An agreement will be needed with local law enforcement agencies for law enforcement on the refuge or, alternatively, a commitment for additional Service law enforcement activity on the refuge. Currently, the Refuge does not have the necessary staff to provide adequate law enforcement.

Speed Limit

Increases in wildlife disturbance and mortality from vehicular traffic are expected. Enforcement of the 25 mph speed limit through the refuge would minimize wildlife mortality to a level that should not affect the biological integrity of the refuge.

Maintenance Costs

Increases in maintenance costs for Bain's Gap Road are expected. Current refuge funding is not sufficient to maintain existing roads/firebreaks nor is there currently a maintenance person/staff for the refuge. A cooperative agreement would need to be completed with the Calhoun County for maintenance of Bain's Gap Road.

Invasive Species

To reduce the chance of the spread of invasive species (kudzu and others) from adjacent areas of Bain's Gap Road to the refuge through maintenance activities, any agreement with Calhoun County for maintenance assistance would need to detail special conditions for mowing and/or movement of dirt along Bain's Gap Road.



#### Coordination/Staff Time

Increased coordination for closure of the road in support of UXO clean up will be needed if Bain's Gap Road is opened to the public. UXO clean up is anticipated in the near future within the refuge. During UXO recovery operations, an exclusion zone will be establish for safety in the event an item being recovered detonates. The size of the exclusion will vary depending on the anticipated maximum size the UXO used in the area. UXO clean up along the section of Bain's Gap Road belonging to the Joint Powers Authority is in progress.

Coordination will be needed to notify the public of the impending closure(s) and to actually close the road. All parties (City, County, local agencies) will need to reach agreement on the division of duties involved in closures of Bain's Gap Road.

#### **Justification:**

**Signature:** Refuge Manager: \_\_\_\_\_  
(Signature and Date)

**Review:** Regional Compatibility Coordinator: \_\_\_\_\_  
(Signature and Date)

**Review:** Refuge Supervisor: \_\_\_\_\_  
(Signature and Date)

**Concurrence:** Regional Chief: \_\_\_\_\_  
(Signature and Date)

**Mandatory 10- or 15-Year Re-Evaluation Date:** October 1, 2015